

Remarks

The Office Action mailed April 29, 2005, has been carefully reviewed and the foregoing amendments have been made as a consequence thereof.

Claims 1-20 are now pending in this application. Claims 1-20 stand rejected.

The rejection of Claims 1-20 under 35 U.S.C. § 103(a) as being unpatentable over Noguchi (JP 03-168522), in view of Furuichi (JP 5-52348) and Myung et al. (US 5,747,783) is respectfully traversed.

Noguchi discloses a microwave oven having a cooking cavity (5), a magnetron (16) and halogen heaters (6, 7), and an operation switch (4) with a main controller (19). When a microwave heating cooking is executed, a commercial power source voltage is applied to a primary coil (18a) of a transformer (18) via a normal close contact (17b) of a relay (17) to generate a stepdown AC voltage at a secondary coil (18b). Halogen heaters (6, 7) are energized to be fired in a power suppressing state to emit food in a housing.

Furuichi discloses a heating and cooking device having a heating chamber (1). A light penetration section (5) and a halogen lamp (6) are installed to the ceiling of the heating chamber (1). The heating and cooking device also includes a heating means (4) where a heating control circuit (8) is also provided. Intermitting lighting of the halogen lamp (6) is available by carrying out a specific operation of a keyboard (7).

Myung et al. disclose a microwave oven with a cooking chamber (3) which is illuminated by different respective colors of light during a given cooking operation. The microwave oven includes a magnetron (11) and an illumination mechanism for illuminating cooking chamber (3) with different respective colors of light. The illumination mechanism includes a rotary plate (76) mounted for rotation about an axis, rotary plate (76) including a plurality of through-holes formed therein, and a plurality of differently colored light-transmitting sheets disposed across respective ones of the through-holes. The microwave oven also includes a lamp (71), an electric motor (74) connected to the main plate (76), a detecting switch (78) for detecting a position rotary of the rotary plate (76), and a microprocessor (79) for receiving a position signal from the detecting switch (78) to either

stop the motor (74), so that the rotary plate (76) can be stopped from rotating, or drive the motor (74), so that the rotary plate (76) can be rotated.

Claim 1 recites a speed cooking oven including “a cooking cavity...a microwave cooking unit for delivering microwave energy into said cooking cavity...a plurality of radiant lamps for delivering radiant energy into said cooking cavity...a control panel operatively connected to said microwave cooking unit and said plurality of radiant lamps for user manipulation of oven feature inputs including an OVENLIGHT input...and a microcomputer coupled to said control panel, said microcomputer programmed to operate said oven in a microwave only cooking mode, a radiant only cooking mode, and a speed cooking mode for a cooking time in accordance with user input to said control panel, and said microcomputer programmed to energize one of said plurality of radiant cooking lamps upon user actuation of said OVENLIGHT input for a predetermined time to illuminate said cooking cavity when said oven is operated in said microwave only mode.”

None of Noguchi, Furuichi, or Myung et al. considered alone or in combination, describes or suggests a speed cooking oven as recited in Claim 1. Specifically, none of Noguchi, Furuichi, or Myung et al. considered alone or in combination, describes or suggests a speed cooking oven with a microcomputer programmed to operate the oven in a microwave only cooking mode, a radiant only cooking mode, and a speed cooking mode for a cooking time in accordance with user input to a control panel, and the microcomputer programmed to energize one of a plurality of radiant cooking lamps upon user actuation of an OVENLIGHT input for a predetermined time to illuminate the cooking cavity of the speed cooking oven when the oven is operated in the microwave only mode.

Rather, in contrast to the pending Claim 1, Noguchi merely describes a microwave oven with halogen heaters energized to be fired in a power suppressing state to emit food in the housing of the microwave oven. Furuichi merely describes that intermitting lighting of a halogen lamp is available by carrying out a specific operation of a keyboard. Myung et al. merely describe a microwave oven with a cooking chamber which is illuminated by different respective colors of light during a given cooking operation. Notably, none of Noguchi, Furuichi, or Myung et al. describes or suggests a microwave oven operated in three modes, wherein a microcomputer is programmed to energize one of a plurality of radiant cooking lamps upon user actuation of an OVENLIGHT input for a predetermined time to illuminate the cooking cavity of the microwave oven when the oven is operated in the microwave only

mode. Accordingly, Claim 1 is respectfully submitted to be patentable over Noguchi, in view of Furuichi and Myung.

Claims 2-11 depend from Claim 1. When the recitations of Claims 2-11 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that dependent Claims 2-11 likewise are patentable over Noguchi, in view of Furuichi and Myung.

Claim 12 recites a method for illuminating a combination oven including a cooking cavity, a microwave cooking unit for delivering microwave energy to the cooking cavity, at least one radiant cooking lamp for delivering radiant energy to the cooking cavity, and a control panel operatively connected to the microwave cooking unit and the at least one radiant cooking lamp, the control panel including an OVEN LIGHT input switch. The method including “the steps of: energizing one of the radiant lamps with a soft start when the OVEN LIGHT input switch is actuated by a user, thereby illuminating the oven cavity...maintaining energization of the energized radiant lamp for a predetermined period of time...and de-energizing the energized radiant lamp when the predetermined time has elapsed.”

None of Noguchi, Furuichi, or Myung et al. considered alone or in combination, describes or suggests a method for illuminating a combination oven as recited in Claim 12. Specifically, none of Noguchi, Furuichi, or Myung et al. considered alone or in combination, describes or suggests a method including the step of energizing one of the radiant lamps with a soft start when an OVEN LIGHT input switch is actuated by a user, thereby illuminating the oven cavity. Rather, in contrast to the pending Claim 12, Noguchi describes a microwave oven with halogen heaters energized to be fired in a power suppressing state to emit food in the housing of the microwave oven. Furuichi describes that intermitting lighting of a halogen lamp is available by carrying out a specific operation of a keyboard. Myung et al. merely describe a microwave oven with a cooking chamber which is illuminated by different respective colors of light during a given cooking operation. Accordingly, Claim 12 is respectfully submitted to be patentable over Noguchi, in view of Furuichi and Myung.

Claims 13-16 and 18 depend from Claim 12. When the recitations of Claims 13-16 and 18 are considered in combination with the recitations of Claim 12, Applicants respectfully submit that dependent Claims 13-16 and 18 likewise are patentable over Noguchi, in view of Furuichi and Myung.

Claim 19 recites a speed cooking oven comprising “a microcomputer...a shell comprising a cooking cavity...a radiant cooking unit comprising at least one radiant cooking lamp for delivering radiant energy into said cooking cavity, said radiant cooking unit operatively connected to said microcomputer...a microwave cooking unit for delivering microwave energy into said cooking cavity and operatively connected to said microcomputer...a control panel mounted to the shell and operatively connected to the microcomputer for user manipulation of an OVEN LIGHT switch...a door mounted to the shell for closing said cooking cavity, said door comprising a tinted window to shield a user from intense light inside said cooking cavity during oven operation...said microcomputer programmed to operate said oven in a microwave only cooking mode, a radiant only cooking mode, and a speed cooking mode for a cooking time in accordance with user input to said control panel...and said microcomputer programmed to energize said radiant cooking lamp upon user actuation of said OVEN LIGHT switch for a predetermined time when said oven is operated in said microwave only mode, thereby illuminating said cooking cavity and enabling visualization of food through said window.”

None of Noguchi, Furuichi, or Myung et al. considered alone or in combination, describes or suggests a speed cooking oven as recited in Claim 19. Specifically, none of Noguchi, Furuichi, or Myung et al. considered alone or in combination, describes or suggests that a speed cooking oven has a microcomputer programmed to operate the oven in a microwave only cooking mode, a radiant only cooking mode, and a speed cooking mode for a cooking time in accordance with user input to a control panel, and the microcomputer is programmed to energize the radiant cooking lamp upon user actuation of said OVEN LIGHT switch for a predetermined time when the oven is operated in the microwave only mode, thereby illuminating the cooking cavity and enabling visualization of food through a window.

Rather, in contrast to the pending Claim 19, Noguchi describes a microwave oven with halogen heaters energized to be fired in a power suppressing state to emit food in the housing of the microwave oven. Furuichi describes that intermitting lighting of a halogen lamp is available by carrying out a specific operation of a keyboard. Myung et al. merely describe a microwave oven with a cooking chamber which is illuminated by different respective colors of light during a given cooking operation. Notably, none of Noguchi, Furuichi, or Myung et al. describes or suggests a speed cooking oven with a microcomputer programmed to operate the oven in a microwave only cooking mode, a radiant only cooking

mode, and a speed cooking mode for a cooking time in accordance with user input to a control panel, and the microcomputer is programmed to energize the radiant cooking lamp upon user actuation of said OVEN LIGHT switch for a predetermined time when the oven is operated in the microwave only mode, thereby illuminating the cooking cavity and enabling visualization of food through a window. Accordingly, Claim 19 is respectfully submitted to be patentable over Noguchi, in view of Furuichi and Myung.

Claim 20 depends from Claim 19. When the recitations of Claim 20 are considered in combination with the recitations of Claim 19, Applicants respectfully submit that dependent Claim 20 likewise is patentable over Noguchi, in view of Furuichi and Myung.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Noguchi according to the teachings of Furuichi and Myung et al. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Rather, the present Section 103 rejection appears to be based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Noguchi is cited for teaching a microwave oven with halogen heaters energized to be fired in a power suppressing state to emit food in the housing of the microwave oven. Furuichi is cited for teaching intermitting lighting of a halogen lamp is available by carrying out a specific operation of a keyboard. Myung et al. are cited for teaching a microwave oven with a cooking chamber which is illuminated by different respective colors of light during a given cooking operation.

Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants respectfully request that the Section 103 rejection be withdrawn.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather,

there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

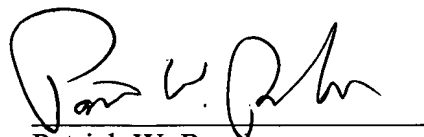
Moreover, for a combination microwave oven, every components of the combination oven may be known in the art. However, none of Noguchi, Furuichi, or Myung et al. considered alone or in combination, describes or suggests how to combine these known components together to achieve such a function which the microwave oven of the current invention has achieved. Specifically, none of the cited references suggests or describes how to program a microcomputer to energize one of the radiant lamps to illuminate the cooking cavity for a predetermined time to avoid contributing more heat energy to the cooking cavity while the microwave oven is operated in a microwave only mode.

In addition, even if Noguchi were combined with Furuichi and Myung et al., they still can not meet all the limitations of the pending Claims of current application.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-20 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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